

# SECTION 4A

---

## **Skilled nursing facility services**

---

## R E C O M M E N D A T I O N S

- 4A-1** The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2007.

.....  
**COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2**

- 4A-2** The Secretary should modify the PPS for skilled nursing facilities to more accurately capture the cost of providing care to different types of patients. This new system should:
- ▶ reflect clinically relevant categories of patients;
  - ▶ more accurately distribute payments for nontherapy ancillary services;
  - ▶ improve incentives to provide rehabilitation services based on the need for therapy; and
  - ▶ be based on more contemporary, representative data than the current system based on time study data from 1990, 1995, and 1997.

.....  
**COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2**

- 4A-3** To improve quality measurement, the Secretary should:
- ▶ collect information on activities of daily living at admission and at discharge;
  - ▶ develop and use more quality indicators, including process measures, specific to short-stay patients in skilled nursing facilities; and
  - ▶ put a high priority on developing appropriate quality measures for pay for performance.

.....  
**COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2**

# SECTION 4A

## Skilled nursing facility services

### Section summary

In this section, we present information on providers of skilled nursing facilities (SNFs). The latest data on the supply of SNF providers show that the total number of SNFs increased less than 1 percent between 2004 and 2005, with hospital-based SNFs continuing to exit and freestanding facilities entering the program. The number of SNF-certified beds also increased, but it is unclear whether this represents new capacity or new certification of existing beds as SNF beds.

The volume of SNF services increased between 2002 and 2003, following the trend since the implementation of the prospective payment system (PPS). Admissions increased 7 percent and covered days increased 9 percent. Continued growth in the volume of SNF services suggests continued access to care for Medicare beneficiaries. Total payments increased from \$14.0 billion to \$14.4 billion between 2002 and 2003, a 2.9 percent increase. At this same time the average payment per day declined, due to elimination of some temporary payment add-ons.

### In this section

- Are Medicare payments adequate in 2006?
- How should Medicare payments change in 2007?
- Update and distributional recommendations
- Improving measurement of skilled nursing facility quality
- Quality measurement recommendation

Evidence on the quality of SNF care continues to be limited. The two sets of quality measures of SNF care for short-stay patients show that quality has changed little over time. Better quality measures and data collection are needed.

Large publicly traded companies that operate SNFs have access to capital. Analysts' reports of nonprofit SNFs show more limited access to capital than for-profit SNFs, but data on their borrowing are not as readily available.

In sum, the evidence generally indicates that Medicare beneficiaries continue to have access to skilled nursing facility services. The aggregate Medicare margin for freestanding SNFs, which accounted for 83 percent of covered days in 2003, is 13.5 percent in 2004 and projected to be 9.4 percent in 2006. Given these circumstances, SNF payments are more than adequate to accommodate cost growth; thus no update is needed.

---

## Recommendation 4A-1

---

### COMMISSIONER VOTES:

YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

---

*The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2007.*

The Commission remains concerned that the current SNF patient classification system does not appropriately distribute resources among patients with different resource needs, in spite of the Centers for Medicare & Medicaid Services' (CMS's) refinement of the payment system in 2006. SNFs that care for more patients with expensive nonrehabilitation therapy needs may not be able to operate as profitably under the prospective payment system for SNFs as those that care for a higher proportion of patients with short-term rehabilitation needs.

---

## Recommendation 4A-2

---

*The Secretary should modify the PPS for skilled nursing facilities to more accurately capture the cost of providing care to different types of patients. This new system should:*

- *reflect clinically relevant categories of patients;*
- *more accurately distribute payments for nontherapy ancillary services;*
- *improve incentives to provide rehabilitation services based on the need for therapy; and*
- *be based on more contemporary, representative data than the current system based on time study data from 1990, 1995, and 1997.*

COMMISSIONER VOTES:

YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

---

Currently, CMS has only three quality measures for SNF patient care. These measures—delirium, pain, and pressure ulcers—are too limited to be the only set of quality measures that CMS uses for SNFs. One way to improve the SNF measure set would be to collect activities of daily living (ADLs) at admission and discharge. However this does not address all the shortcomings of the current measures nor does it expand the set of quality measures for SNF care. Other quality indicators—rehospitalization, discharge to the community, ADL improvement, and process measures—should be developed because they measure important aspects of care for SNF patients and could apply to all SNF stays. Medicare urgently needs quality indicators that allow the program to assess whether patients benefit from SNF care and to distinguish between facilities. ■

---

## Recommendation 4A-3

---

*To improve quality measurement, the Secretary should:*

- *collect information on activities of daily living at admission and at discharge;*
- *develop and use more quality indicators, including process measures, specific to short-stay patients in skilled nursing facilities; and*
- *put a high priority on developing appropriate quality measures for pay for performance.*

COMMISSIONER VOTES:

YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

---



## Background

### What is SNF care and where is it provided?

Medicare beneficiaries who need short-term skilled nursing care or rehabilitation services on a daily basis in an inpatient setting following a medically necessary hospital stay of at least three days qualify to receive covered services in a skilled nursing facility (SNF).<sup>1</sup> Medicare spending on SNFs was \$14.4 billion for 2.4 million admissions in 2003 and represented 6 percent of total Medicare spending. SNF services may be provided in freestanding or hospital-based facilities. In 2003, 90 percent of facilities were freestanding, and 83 percent of Medicare-covered SNF stays were in freestanding facilities. The share of skilled nursing facilities, Medicare payments, and Medicare-covered stays varies for hospital-based, freestanding, and other categories of SNFs in 2003 (Table 4A-1).

A freestanding SNF is typically part of a nursing home that also provides long-term care, which Medicare does not cover. Patients who are in a facility for a Medicare-covered skilled nursing stay are typically a small share of the total patient population in a Medicare-participating skilled nursing facility. The remaining patients are non-Medicare skilled nursing care patients or long-term care residents. At the median, Medicare-covered SNF days in 2004 made up just 10 percent of freestanding SNFs' total days. Medicare-covered SNF days were more than one-quarter of the total patient days in just 5 percent of SNFs.

### How does the Medicare SNF payment system work?

Medicare's prospective payment system (PPS) for SNF services started on July 1, 1998.<sup>2</sup> The prospectively determined per day payment rates cover all routine, ancillary, and capital costs, as well as costs for many items and services that Medicare Part B reimbursed before CMS implemented the SNF prospective payment system.<sup>3</sup> Under the PPS, Medicare pays SNFs a set amount for each day of care, adjusted for the case-mix group of each patient and geographic cost differences.

The payment system adjusts the base payment rate by classifying each Medicare patient into a case-mix group. The case-mix groups are intended to group patients with similar predicted resource needs. Weights associated with the case-mix groups adjust payments up or down

**TABLE  
4A-1**

### Characteristics of skilled nursing facilities, 2003

Type of SNF	Facilities	Medicare payments	Medicare-covered stays
Freestanding	90%	90%	83%
Hospital-based	10	10	17
Urban	67	81	78
Rural	33	19	22
Large chain	15	20	17
Not large chain	85	80	83
For profit	67	71	64
Nonprofit	28	26	31
Government	5	3	4

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of the Provider of Services file and 2003 Medicare Provider Analysis and Review file.

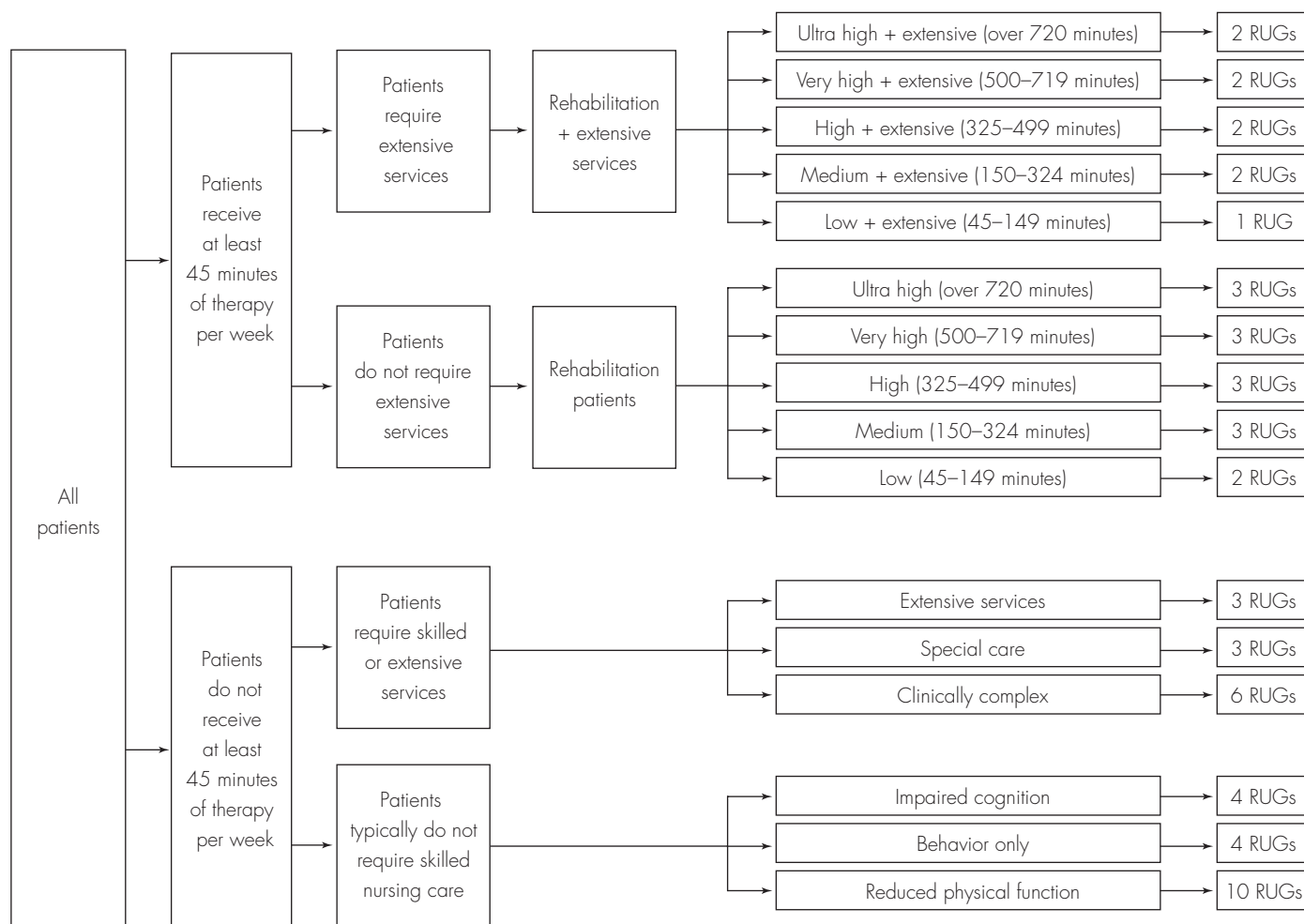
depending on those needs. Patients' characteristics and service needs are determined by periodic assessments using the Minimum Data Set (MDS).

The case-mix system for SNFs is called resource utilization groups (RUGs). As of January 1, 2006, the latest version of RUGs—the 53-group RUG (RUG-53) classification system—went into effect, replacing the 44-group RUG (RUG-44) payment system. (Additional detail on the basics of the SNF payment system can be found at [http://www.medpac.gov/publications/other\\_reports/Dec05\\_payment\\_basics\\_SNF.pdf](http://www.medpac.gov/publications/other_reports/Dec05_payment_basics_SNF.pdf).) Each RUG-53 group has associated weights used to adjust the base payments to reflect differences in patients' expected resource use.<sup>4</sup> Assigning a beneficiary to a RUG-53 group is based on (Figure 4A-1, p. 172):

- the number of minutes of therapy (physical, occupational, or speech) that the patient has used or is expected to use;
- the need for certain services (e.g., respiratory therapy or specialized feeding);
- the presence of certain conditions (e.g., pneumonia or dehydration);

**FIGURE  
4A-1**

**RUG-53 classification scheme**



**Note:** RUG-53 (resource utilization group, 53-group model). Differences between RUGs are based on activity of daily living score, service use, and the presence of certain medical conditions. The extensive services category includes patients who have received intravenous medications or tracheostomy care, have required a ventilator/respirator or suctioning in the past 14 days, or have received intravenous feeding in the past seven days. The special care category includes patients with multiple sclerosis or cerebral palsy, those who receive respiratory therapy seven days per week, or are aphasic or tube fed. The clinically complex category includes patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy.

**Source:** Figure adapted from Government Accountability Office 2002a.

- an index based on the patient's ability to perform independently four activities of daily living (eating, toileting, bed mobility, and transferring); and in some cases,
- signs of depression.

In compliance with the requirement in law that Medicare's prospective payment bundle for SNFs include payment for nontherapy ancillary (NTA) services, such as prescription drugs and respiratory therapy, CMS included the cost of

NTAs as part of the total costs used to develop Medicare's SNF base payment rates (MedPAC 2005b). Specifically, NTA costs were incorporated into the nursing component of the base rate but were not used to develop the case-mix indexes that adjust the base payment rates. Instead, the payment system distributes payments for nontherapy ancillary services using weights developed from data on nursing time. As a result, the case-mix adjustment does not distribute payments for NTAs according to variation in expected NTA costs across different patient types—payments for patients with high NTA costs are too low and



payments for patients with low NTA costs are too high. This issue has been a matter of concern for the Congress, the Commission, the Government Accountability Office (GAO), the Centers for Medicare & Medicaid Services (CMS), industry stakeholders, and researchers since the early years of the SNF prospective payment system (CMS 2000, Fries et al. 2000, GAO 1999, Kramer et al. 1999, MedPAC 2002, MedPAC 2001, White 2003, White et al. 2002).

Because of known problems with the RUG-based case-mix system, the Congress directed CMS to study alternative systems to the RUGs in the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA). In response, CMS sponsored research on RUG alternatives that categorize patients according to the relative resource use of different patient types. A report on this study was due to the Congress no later than January 1, 2005, but CMS has not released the complete results.

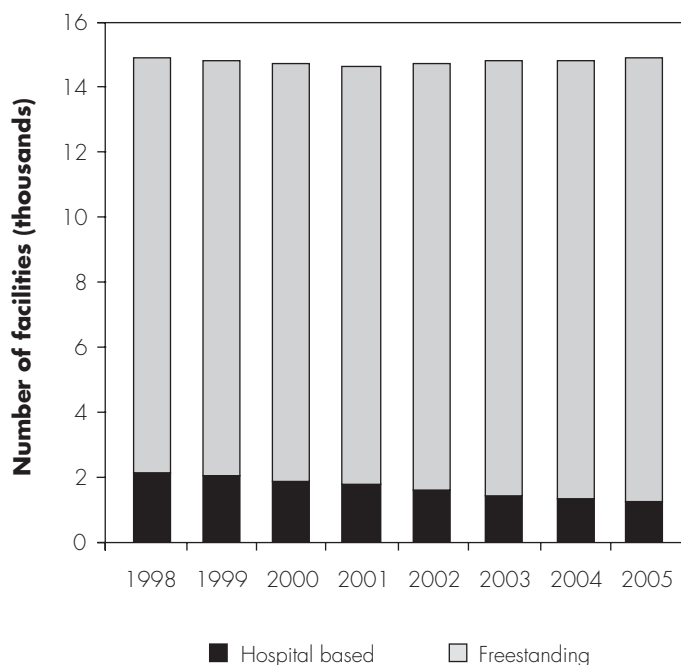
Although CMS modified the payment system in fiscal year 2006, the system continues to distribute payments for NTAs based on the amount of nursing time that certain groups of patients use. Thus, the SNF payment system still needs to be refined to better target payments to patients' resource use. CMS acknowledged in the final rule outlining the RUG refinements that the SNF payment system still needs ongoing evaluation and change and that it intends to use the BIPA-mandated report to Congress to outline a series of next steps to enhance the accuracy of the SNF prospective payment system (CMS 2005). In comments on the proposed regulation, the Commission called for CMS to release that report.

## Are Medicare payments adequate in 2006?

Our indicators of payment adequacy are generally positive for SNFs. We find that the supply of providers remained stable in 2005, with the share of facilities that are freestanding continuing to grow and the share that are hospital based declining. By all measures—total days, total stays, and total payments—volume of SNF services provided to Medicare beneficiaries grew between 2002 and 2003, the latest period for which we have data. This increase in use, combined with providers' statements about the desirability of increasing the Medicare share of the patient population, suggests that access to SNF care for Medicare beneficiaries is good. We continue to have limited quality measures specific to Medicare-covered

**FIGURE 4A-2**

**The number of SNFs has remained stable, but more are freestanding and fewer are hospital-based**



Note: SNF (skilled nursing facility).

Source: MedPAC analysis of CMS Online Survey, Certification, and Reporting (OSCAR) system data.

patients. In 2005, one quality measure CMS publicly reported showed improvement and two others showed no change. The scant evidence on SNF quality argues for the development of additional measures for monitoring quality. These measures could eventually form the basis of a pay-for-performance program for SNFs. Access to capital for for-profit providers appears to be good, but nonprofits may face more limited access to capital. Our analysis of SNFs' Medicare payments and costs found that payments will more than cover SNFs' costs of caring for Medicare patients in 2006.

## Supply of providers

Based on data from CMS's Online Survey, Certification, and Reporting (OSCAR) system, the total number of SNFs increased less than 1 percent from 2004 to 2005 (Figure 4A-2). This trend follows the growth rate of SNF supply over the past five years. The number of hospital-based SNFs participating in the program has continued to decline while the number of freestanding providers has increased.

**TABLE  
4A-2****Medicare payments and use of skilled nursing facilities has grown since 1999**

	1999	2000	2001	2002	2003	Percentage change 2002-2003	Average annual change 1999-2003
Payments (billions)	\$9.5	\$10.4	\$12.7	\$14.0	\$14.4	3%	11%
Average payment per day	\$223	\$236	\$266	\$256	\$242	-5	2
Admissions (thousands)	1,796	1,824	1,950	2,223	2,385	7	7
Covered days (thousands)	42,412	43,811	47,913	54,674	59,416	9	9
Average days per admission	23.6	24.0	24.6	24.6	24.9	1	1

Note: Data include Puerto Rico, Virgin Islands, and unknown. Data do not include swing bed units.

Source: MedPAC analysis of unpublished CMS data.

Hospital-based SNFs proliferated in the period before the PPS was implemented. Following implementation, the number of hospital-based SNFs sharply declined (Dalton and Howard 2002). Hospital-based SNF payments under the PPS were disproportionately reduced relative to freestanding SNF payments. This is because the PPS rates were based primarily on costs of freestanding SNFs, according to the formula prescribed in the Balanced Budget Act of 1997.<sup>5</sup> A recent study found that hospital-based SNF closures in the period following the implementation of the SNF PPS resulted in increased utilization of alternative post-acute care sites and longer acute-care hospital stays. These closures did not have statistically robust effects on mortality and rehospitalization in the period after PPS implementation (White and Seagrave 2005).

Given that facilities vary in size, the number of facilities is an inexact measure of supply. The number of SNF beds would provide more detail on capacity than the number of facilities, but data on the number of beds from the OSCAR system do not provide an easily interpretable count of the number of SNF beds. Facilities may certify all of their beds as SNF beds, even if only a small fraction of the total certified SNF beds are actually intended for or used by patients in Medicare-covered stays. OSCAR data indicate that the supply of SNF and dually-certified SNF/nursing facility beds increased between 2004 and 2005. But this increase could reflect a facility certifying beds as SNF beds without increasing the number of beds in the facility or using the beds for SNF patients.

**Volume of services and access to care**

Between 2002 and 2003, the latest year for which claims data were available, the number of SNF admissions increased 7 percent while the total number of Medicare-covered days increased 9 percent (Table 4A-2). These rates of increase were consistent with the five-year average annual increases in admissions and covered days between 1999 and 2003. The average length of stay per Medicare SNF admission was 1.3 days longer in 2003 than in 1999.

While volume continued to climb in 2003, the average payment per day declined for the second consecutive year. Between 2002 and 2003, it fell from \$256 to \$242. The decline in payments per day results from the elimination of two temporary add-on payments: a 4 percent increase across all RUGs and a 16.7 percent increase for the nursing component of the base rate.

Continued growth in the volume of SNF services suggests continued access to SNF care for Medicare beneficiaries. Large for-profit chains view increasing their Medicare patient shares as a way to improve their financial performance, according to their filings with the Securities and Exchange Commission. Taken together, the continued increase in utilization and the relative attractiveness of Medicare payment rates suggest that Medicare beneficiaries have access to SNFs. We cannot conclude, however, that access is consistently good across all types of patients. The Health and Human Services Office of Inspector General (OIG) studied Medicare beneficiary access to SNF services in 2004, but that report has not yet been released.

Looking ahead, monitoring access for different types of SNF patients is important as CMS implements modifications to the SNF payment system. The elimination of temporary payment add-ons in January 2006 reduced payments for certain medically complex patients who do not qualify for rehabilitation case-mix groups.<sup>6</sup> Following the implementation of the PPS, OIG studies—based on interviews with discharge planners—found access to be generally good for Medicare beneficiaries, although some beneficiaries with complex medical needs may experience delays in accessing SNF care (OIG 2001, OIG 2000a, OIG 1999). Past findings of delays in access make monitoring access for medically complex patients especially important in light of recent payment system changes that affect payments for these patients.

In addition to SNF policy changes, a number of policy changes are occurring in other settings that could affect access to and use of SNF care. Alternative post-acute care settings or even inpatient care can substitute for other post-acute care settings. CMS is currently implementing the 75 percent rule for inpatient rehabilitation facilities and the outpatient therapy cap (both of which could increase demand for SNF care), as well as expanding the post-acute care transfer policy (which could dampen SNF use).

## Quality of care

Our ability to assess the quality of care that skilled nursing facilities provide to their short-stay patients is limited because few quality measures focus specifically on the care provided during a short-term, Medicare-covered post-acute stay. As discussed in our March 2005 report, the quality of SNF care and nursing home care are not necessarily related because the goals and types of care provided to short-term and long-term patients are different (MedPAC 2005c).

The Commission uses two sets of existing measures to monitor SNF-sector trends in quality of care for short-stay patients. The first is the set of three short-stay measures from CMS's Nursing Home Compare (NHC) website; these measures are currently the only publicly reported, SNF-specific quality measures. The second set of measures is preventable hospitalizations for five potentially avoidable conditions. These measures were developed by researchers at the University of Colorado under a contract with CMS (Kramer and Fish 2001). They are not currently publicly reported but can be calculated from administrative data. We found little change in these

measures between 1999 and 2002. However, we were unable to update the preventable hospitalization measures beyond 2002 because the updated data file needed for the computation of these measures was not available from CMS in time for this report.

## Nursing Home Compare short-stay measures

CMS currently publishes three measures of the quality of care for short-stay patients on its NHC website. These measures are the share of each facility's patients:

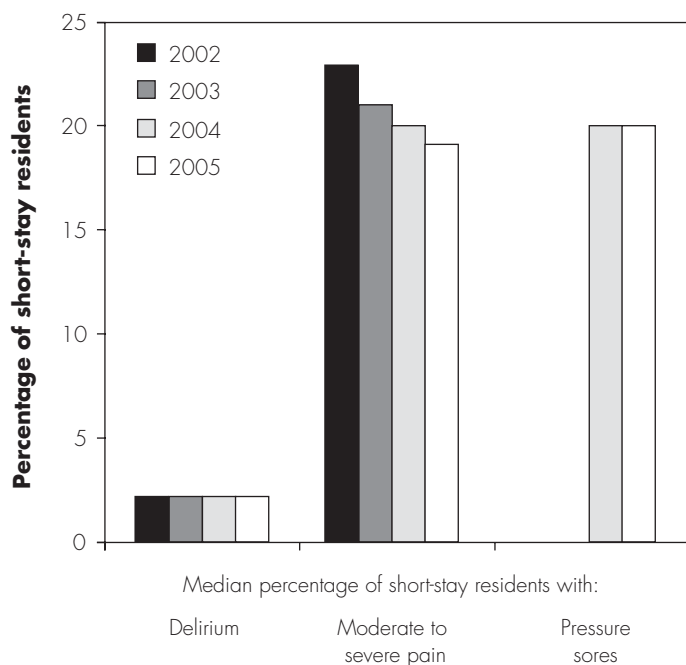
- with symptoms of delirium that represent a departure from usual functioning on a 14-day assessment,
- with moderate pain at least daily or horrible or excruciating pain at any frequency at 14-day assessment, and
- who develop a pressure ulcer between the 5-day and 14-day assessments or who had any stage pressure ulcer at the 5-day assessment.

Analysis of these quality indicators downloaded from the NHC website in the third quarter of each of the past four years shows that the median share of short-stay residents with delirium has remained the same, the median share with pain has declined, and the median proportion with pressure sores did not change from 2004 to 2005 (Figure 4A-3, p. 176).<sup>7</sup> It should be noted, however, that although the measure continues to be used on the NHC website, two validation studies found the pressure ulcer measure to be invalid (Abt 2005, Abt 2003). For each of these measures in each year, there are no data on the NHC for about one-third of facilities either because the data are missing or because the number of residents with these conditions at the point in the stay when these conditions are measured is too small to report. Patients who do not have a 14-day assessment cannot generate a quality score on any of these indicators, so we cannot use these measures to evaluate the quality of care for the sizeable number of SNF stays (45 percent in 2001) that last fewer than 14 days.

As we discussed in our 2005 March report, the SNF assessment instrument—the Minimum Data Set (MDS)—as it is currently administered, is limited in its ability to collect information about the quality of SNF care (MedPAC 2005c). (Later in this section we discuss this issue further in the context of the need to develop additional quality measures for SNFs.)

**FIGURE  
4A-3**

**Selected quality indicators for  
SNFs are stable or improving**



**Note:** Skilled nursing facility (SNF). Data not available on pressure sores for 2002–2003. Median proportions are not weighted by the number of short-stay patients in the facility. Facilities that were categorized as Medicaid-participating-only were excluded from this analysis. Data are from a point in time in the fall of each year. For each of these measures in each year, the Nursing Home Compare has no data for about one-third of facilities.

**Source:** MedPAC analysis of CMS Nursing Home Compare data.

**Rehospitalization for five potentially avoidable conditions**

National average rates of rehospitalization within 30 days for five potentially avoidable conditions—electrolyte imbalance, respiratory infection, congestive heart failure, sepsis, and urinary tract infection—increased between 1999 and 2002 (Table 4A-3). These conditions are characterized as “potentially avoidable” because they may be avoided with proper assessment, management, and monitoring by facility staff (Kramer and Fish 2001). The measures are risk adjusted for diagnosis and functional severity of patients using covariates specific to each measure and are calculated for each year using all SNF stays that began in that year in facilities with more than 10 stays.<sup>8</sup>

**SNFs’ access to capital**

Providers’ access to capital affects their ability to invest in their facilities and enhance their patient care capabilities. In sectors where Medicare payments make up a larger share of payments, the impact of Medicare payment on access to capital is more direct and substantial. SNFs’ ability to access capital is less attributable to Medicare payments because of the relatively small share of SNF providers’ payments that are from Medicare and the relatively large share that is from Medicaid, the largest payer of nursing facility care. Providers argue Medicaid payments are inadequate to cover their costs for nursing home patients. In aggregate, Medicare payments made up 20 percent of total payments to facilities providing skilled nursing facility services in 2004. Medicare is an important source of revenue for providers, however. According to providers, Medicare payments are critical to their financial bottom lines because Medicare rates are better than those of Medicaid.

To the extent that nursing facilities may have difficulty accessing capital, raising Medicare payments may do little to alleviate this problem given the small share of patients with a Medicare-covered stay. In addition, using Medicare payments to compensate for any perceived inadequacies in Medicaid payments would be inefficient. If Medicare were to pay still higher rates to subsidize low Medicaid payments, states might be encouraged to reduce Medicaid payments even further. In addition, payments would be directed to the wrong facilities. Facilities with low Medicare shares and high Medicaid shares—presumably the facilities that need revenues the most—would receive the least if subsidies were provided in the form of higher Medicare payments.

Because hospital-based SNFs access capital through their parent hospital organizations and because they are a small proportion of all SNFs (Table 4A-1, p. 171), our assessment of access to capital focuses on freestanding SNFs. Information on the financial performance of publicly traded, for-profit chains that operate freestanding nursing facilities is relatively accessible. In 2003, the 11 largest chains represented 15 percent of all facilities and 17 percent of Medicare-covered stays. On the other hand, information about the non-publicly traded chains and nonprofit facilities’ access to capital is more difficult to obtain.

The large, publicly traded companies operating skilled nursing facilities also have other lines of business—long-



term care hospitals, hospices, institutional pharmacies, and assisted living facilities. As a result, a company's overall financial performance may not be entirely attributable to its SNF business. That said, evidence suggests that these chains have access to capital. In November 2005, analysts reported a positive forecast for the long-term care sector, including SNFs (Standard & Poor's 2005). Increased demand for services, diversification of operations, and stabilization (or possible declines) of labor and supply costs and malpractice expenses will all contribute to improved profitability.

In aggregate, stock performance for the large chains over the past year has been solid. An index of seven publicly traded companies operating SNFs increased 32 percent in the year ending September 2005, outperforming the Standard & Poor's 500 index, which increased 11 percent during this period (Cain Brothers 2005). Four of the largest chains have seen their stock prices climb between 15 percent and 38 percent in the past year. Chains also report new facility construction and renovation.

One analyst of the SNF industry described another type of transaction that has recently been a source of capital for several large chains operating SNFs. Private equity investors have financed acquisitions of nursing facility chains by borrowing heavily against the underlying facilities. The facility mortgages are bundled into collateralized mortgage obligations and sold on the bond market at a slight premium relative to comparable debt. These financial arrangements have been pursued in the last couple of years in a booming real estate market and an environment of relatively low interest rates. Typically, the operator of each individual facility and the landlord become separate entities, which enhances the value of the transaction because the real property and the landlord are protected from malpractice lawsuits that may be brought against the facility operator (van der Walde 2006).

In contrast, according to FitchRatings, the overall industry outlook for freestanding nonprofit nursing facilities remains negative in 2005. As it reported for 2004, the "negative outlook is due to the significant challenges in the industry, which will continue to pressure already weak financial performance" (FitchRatings 2005). These challenges are identified as "inadequate Medicaid reimbursement; rising insurance, labor, and benefits expense; and increased capital needs." FitchRatings also notes that "[c]apital needs continue to increase due to deferred spending on plant" which they explain "is usually

**TABLE  
4A-3**

**Rehospitalization for five conditions increased slightly**

Measure	1999	2000	2001	2002
Electrolyte imbalance	3.7%	3.7%	4.1%	4.0%
Respiratory infection	3.0	2.9	3.1	3.2
Congestive heart failure	3.2	3.3	3.7	3.7
Sepsis	1.2	1.2	1.3	1.3
Urinary tract infection	2.1	2.2	2.4	2.4

Note: Data for 2002 are for January through June 2002. Rehospitalizations are mean rates and are adjusted for patient risk factors.

Source: MedPAC analysis of Medicare skilled nursing facility stay file, using a program developed by Andrew M. Kramer, MD, and Ron Fish, MBA, at the Center on Aging, University of Colorado Health Sciences Center.

the result of weak financial performance and limited free cash flow."

From a peak exceeding \$2 billion dollars in 1998, annual public debt issuance for nonprofit nursing homes has declined to about half a billion in 2002. Bond issuance for nursing homes dropped yet again from \$388 million in 2003 to \$382 million in 2004. FitchRatings expects that there will not be many investment grade nursing homes and that the "credits that have obtained investment-grade ratings typically have additional support through an endowment or affiliation with a large health system" (FitchRatings 2005). To the extent they are part of a larger organization with assisted living or continuing care retirement communities, they may have more sources of capital. In addition, recent low interest rates mean that facilities may be able to access relatively cheap funds through mortgages and other bank loans.

Access to capital for nursing facilities is also facilitated by a program operated by the Department of Housing and Urban Development (HUD). HUD's Section 232/223(f) program insures mortgages through HUD-approved lenders for construction and rehabilitation of nursing facilities and assisted living facilities. In fiscal year 2004, the programs insured new loans for nursing facilities totaling \$1.2 billion for 196 facilities with 26,788 beds (HUD 2004). In fiscal year 2005, new lending to nursing homes totaled \$821 million for 128 loans (HUD 2005).

### Payments and costs for 2006

Another indicator of the adequacy of Medicare payments is the aggregate Medicare margin for SNFs. The margin is

**TABLE  
4A-4****Freestanding skilled nursing  
facility Medicare margin,  
by facility group, 2004**

Facility type	Facilities	Medicare margin
All facilities	11,049	13.5%
Urban	7,606	12.8
Rural	3,432	16.6
Large chain	2,043	18.2
Not large chain	9,006	12.0
For profit	8,374	16.1
Nonprofit	2,304	3.8
Government	371	-1.1

Note: Eleven facilities had missing urban or rural designations.

Source: MedPAC analysis of Medicare cost report and Provider of Services file from CMS.

the difference between Medicare SNF payments and costs, divided by Medicare payments to SNFs.

When modeling 2006 payments and costs using 2004 data, we incorporate policy changes that went into effect in 2005 and 2006. We also take into account payment changes, other than the scheduled update, scheduled to be in effect in 2007. This year's assessment of SNF payment adequacy occurs in the context of several changes to the payment system that will be effective in 2006. SNFs received a full market basket update of 3.1 percent for fiscal year 2006. However, due to other payment policy changes, CMS estimates that all SNFs in aggregate will receive a 0.1 percent payment increase in fiscal year 2006 (CMS 2005). These payment policy changes are:

- the addition of nine groups to the patient classification system used to adjust payments for differences in case mix;
- the expiration of two temporary payment add-ons—the 6.7 percent add-on for the 14 rehabilitation RUGs and the 20 percent add-on for the 12 extensive care, special care, and clinically complex RUGs; and
- uniform increases to the nursing weights associated with each case-mix group.

The distributional impact of these changes differs by type of facility. For example, CMS estimates that hospital-based SNFs will have payment increases—the expected

impact of these changes for urban hospital-based SNFs is an increase of 4.6 percent and for rural hospital-based SNFs it is 4.1 percent. Freestanding SNFs in aggregate are estimated to see payments reduced in fiscal year 2006.

Under the prospective payment system, SNFs have an incentive to decrease the costs of providing each day of care. Analysis of SNFs' reported costs found that cost growth slowed since the implementation of the PPS in 1998. Freestanding SNFs' average annual per day cost growth for Medicare patients was 3.7 percent between 2000 and 2004.<sup>9</sup> At the 25th percentile, total per day Medicare cost growth was 1 percent, and at the 75th percentile, average annual cost growth was 7.2 percent. For-profit facilities have had lower average annual cost growth between 2000 and 2004 (3.5 percent) than nonprofit (4.4 percent) or government facilities (4.5 percent). Cumulative cost growth for freestanding SNFs has generally tracked the market basket increases in payment between 2000 and 2004.

Based on 2004 cost report data, we estimate that the 2006 aggregate Medicare margin for freestanding SNFs is 9.4 percent.<sup>10</sup> This estimate includes the impact of a provision in the Deficit Reduction Act of 2005 that reduces bad debt payment from 100 percent to 70 percent; bad debt for dually-eligible beneficiaries will still be reimbursed at 100 percent. The Congressional Budget Office estimates that this will reduce Medicare SNF payments by less than \$50 million in 2007. The 2006 margins represent a decline from 2004 base year margins of 13.5 percent (Table 4A-4). This margin indicates that in aggregate, payments cover the costs of caring for Medicare beneficiaries in a Medicare-covered SNF stay. However, variation in Medicare margins persists among different types of freestanding skilled nursing facilities. As the Commission and the GAO found in past years, margins differ by provider type (GAO 2003). For example, nonprofit facilities had lower margins (3.8 percent) than for-profit facilities (16.1 percent) in 2004.

The hospital-based SNF margin was -86 percent in 2004. Interpreting the consistently negative Medicare margin for hospital-based SNFs is difficult. Hospitals may have higher cost structures than freestanding nursing homes or may serve different patients (based on observed and unobserved characteristics). One study that looked at cost and patient differences in hospital-based and freestanding SNFs found that hospital-based SNFs had total costs per day that were twice as high as freestanding SNFs' cost per day in 1999 (Liu and Black 2003). It found that hospital-

based SNFs had higher routine (including nursing and overhead) costs, higher nontherapy ancillary costs, and lower therapy costs. Patients in hospital-based SNFs had shorter lengths of stay and greater use of NTA services such as IV therapy and respiratory therapy. Hospital-based SNFs discharged a higher share of patients to other Medicare-financed providers, suggesting that they are “oriented toward providing care for the early stage of post-acute care.” The study concluded that in the absence of risk-adjusted outcomes data to compare facilities, it is unclear whether higher costs in hospital-based SNFs result in better quality and whether they should, therefore, receive differential payments.

Another recent study for this Commission examined outcome differences on three measures—length of stay, discharge within 30 days, and preventable rehospitalizations—between hospital-based and freestanding SNFs (Dalton et al. 2004). This research found that without controlling for selection of patients, hospital-based SNFs have better average outcomes on these measures. However, controlling for selection eliminated much of the difference between freestanding and hospital-based SNF outcomes. For example, controlling for selection reduced three-quarters of the difference between hospital-based and freestanding SNFs in the share of patients discharged to home or community within 30 days from a 41.6 percentage point difference to an 8.9 percentage point difference. The length of stay difference was similarly reduced from an 18.3 day difference to a 4.1 day difference, and the preventable hospital readmission difference was reduced by two-thirds, from a 6.2 percentage point difference to a 2.1 percentage point difference. These findings suggest that much of the difference in outcomes between hospital-based and freestanding SNFs is a function of patient selection rather than provider efficiency. Even after controlling for selection, differences in outcomes remain, but the analysis could not definitely determine the “extent to which the final adjusted differences identified in these models are still attributable to unmeasured patient selection factors rather than underlying institutional differences in care patterns” (Dalton et al. 2004).

---

## How should Medicare payments change in 2007?

---

Our indicators of payment adequacy suggest continued access to SNF care, but evidence on quality continues to

be limited. We find that the overall supply of providers remained stable in 2005. Total days, total stays, and total payments all grew from 2002 to 2003, the latest period for which we have data. The limited available measures suggest that quality of SNF care has not changed in the most recent year. The scant evidence on SNF quality argues for the development of additional measures for monitoring quality. Access to capital shows a somewhat mixed picture with large chain providers appearing to have good access to capital, but nonprofits facing more limited access to capital. Analysis of SNFs’ Medicare payments and costs found that payments will more than cover SNFs’ costs of caring for Medicare patients in 2006.

Although evidence suggests that SNFs can more than accommodate the cost of caring for Medicare beneficiaries in 2007 without an increase in the base rate, the case-mix system that distributes payments needs to be refined. In past years, the Commission has recommended that the Secretary develop a new classification system to be used to adjust payments to SNFs because of concerns about the current payment system’s method for classifying and paying for patients with different care needs. Although CMS changed the payment system, the changes do not refine the distribution of payment for nontherapy ancillary costs, one of the Commission’s chief concerns. Payments for extensive services patients who also need therapy were increased with the creation of a separate payment category for these patients; the increase is a function of higher nursing weights for the new RUGs. However, payments for extensive services patients who do not receive therapy were actually reduced, absolutely and relative to other payment groups, under the new payment system.<sup>11</sup> Patients who qualify for the extensive service category had, on average, the highest NTA costs (Fries et al. 2000, White et al. 2002).

The Commission will be exploring ways that the SNF payment system could be modified to pay for nontherapy ancillary services more accurately. We will consider whether the system could better pay for these services by basing payment on the patient characteristics associated with using them. We will also consider carving out these services from the payment bundle, which covers all routine, ancillary, and capital costs of furnishing SNF care, including services that were covered under Part B prior to the implementation of the PPS.<sup>12</sup> Currently, the SNF PPS excludes some services—such as ambulatory surgery performed in operating rooms, certain chemotherapy agents, and customized prosthetic devices—from the SNF

payment bundle, and Medicare pays separately for these items. In a study of excluded services, the GAO outlined three criteria that currently excluded services meet; they are “high cost, infrequently provided during a SNF stay, and not likely to be overprovided” (GAO 2001). The GAO concluded that questions remain about whether additional services should also be excluded and how to modify the exclusions over time. The GAO recommended that the program:

- exclude services from the PPS if they meet the three exclusion criteria, and
- develop a strategy to collect and analyze cost and use data on all services provided to Medicare beneficiaries during a SNF stay.

As we consider refinements to the SNF prospective payment system, we will investigate whether data exist or should be collected to evaluate whether other nontherapy ancillary services meet these criteria and determine the implications of excluding services from the payment bundle.

Two other issues with the SNF payment system were also not addressed by the revised RUGs. The new system continues to pay for the amount of therapy provided or estimated to be provided. It also continues to rely on a costly method for determining the case-mix weights using time studies that must be updated periodically to remain current. The data that were used to develop the current case-mix weights are from time studies conducted in 1990, 1995, and 1997—prior to the implementation of the PPS. The weights have not been recalibrated since the implementation of the PPS. However, CMS plans to conduct a new nursing facility time study in 2006.

## Update and distributional recommendations

SNFs should be able to accommodate cost changes in 2007 with the Medicare margin they have in 2006.

### RECOMMENDATION 4A-1

**The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2007.**

### RATIONALE 4A-1

The evidence generally indicates that Medicare beneficiaries continue to have access to skilled nursing facility services. Under policies in current law for 2006 and 2007, we project the Medicare margin for freestanding SNFs will be 9.4 percent in fiscal year 2006. Given these circumstances, SNF payments appear more than adequate to accommodate cost growth; thus no update is needed.

### IMPLICATIONS 4A-1

#### Spending

- This recommendation reduces Medicare spending relative to current law by \$200 million to \$600 million for fiscal year 2007 and by \$1 billion to \$5 billion over five years.

#### Beneficiary and provider

- No adverse impact on beneficiary access is expected. This recommendation is not expected to affect providers’ willingness and ability to provide care to Medicare beneficiaries.

Although in aggregate payments appear more than adequate, the payment system should be refined to distribute payments more equitably across SNF services using more current data and to encourage the provision of services based on patient need.

### RECOMMENDATION 4A-2

**The Secretary should modify the PPS for skilled nursing facilities to more accurately capture the cost of providing care to different types of patients. This new system should:**

- reflect clinically relevant categories of patients;
- more accurately distribute payments for nontherapy ancillary services;
- improve incentives to provide rehabilitation services based on the need for therapy; and
- be based on more contemporary, representative data than the current system based on time study data from 1990, 1995, and 1997.

### RATIONALE 4A-2

The Commission remains concerned that the current SNF patient classification system does not appropriately distribute resources among patients with different resource needs, in spite of CMS’s refinement of the payment system in 2006. The Commission’s long-standing concerns with the payment system were not addressed by the refinements to the payment system:



- The RUG-based classification system does not directly capture differences in patient costs that arise from nontherapy ancillary services, such as prescription drugs and respiratory therapy.
- Payments for rehabilitation services are based on the actual or estimated number of minutes of therapy, rather than on a patient's clinical characteristics.
- Payment rates for the RUGs are based on relative weights derived from old data that are expensive and time-consuming to update.

SNFs that care for more patients with expensive nonrehabilitation therapy needs may not be able to operate as profitably under the prospective payment system for SNFs as those that care for a higher proportion of patients with short-term rehabilitation needs. This recommendation would provide a more equitable distribution of resources among patients with different resource needs.

#### IMPLICATIONS 4A-2

##### Spending

- This recommendation would not affect federal program spending relative to current law because it would be implemented in a budget neutral manner.

##### Beneficiary and provider

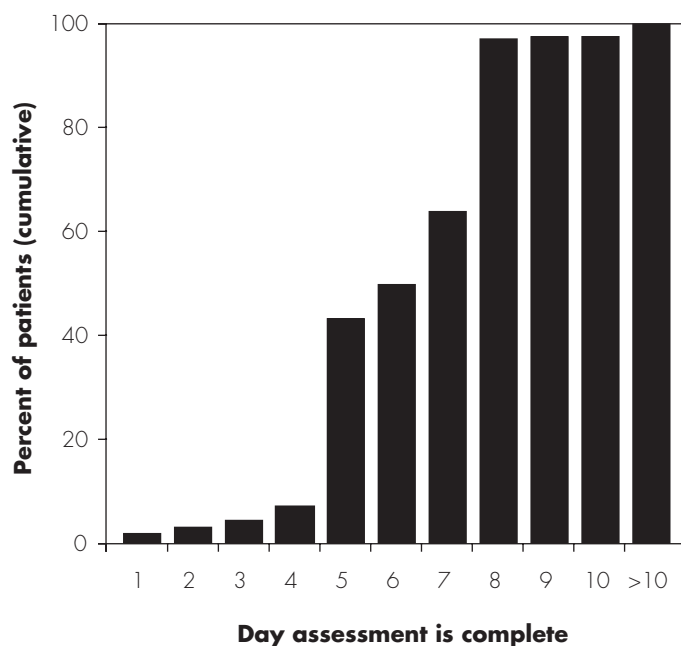
- This recommendation is expected to improve beneficiary access and could have redistributive effects on providers.

#### Improving measurement of skilled nursing facility quality

Last year we began work to identify ways to improve the SNF-specific information available to assess quality because currently reported SNF quality measures are limited in number and their ability to assess the quality of SNF care. We recommended additional measures to the three currently reported MDS-derived measures and concluded that further work was needed to determine whether additional measures are needed to assess SNF quality and pay facilities based on the quality of care they provide. This year, we reviewed the literature and discussed with experts the possibility of developing process measures of SNF quality. Broad process measures that reflect the care of all patients as well as narrower diagnosis-specific measures could distinguish between

**FIGURE 4A-4**

**Most SNF patients are not assessed at admission**



Note: SNF (skilled nursing facility).

Source: MedPAC analysis of 2004 Minimum Data Set data.

SNFs that have good processes and those that do not when based on effective clinical processes. However, even with the development of additional quality measures, a potential barrier to measuring SNF quality at the facility level is the small SNF patient population and the still smaller population of patients with any given diagnosis.

#### Limitations of the MDS data

The three current MDS-derived measures are limited in number and in their ability to capture the experience of a large share of SNF patients and facilities. Currently, SNF patients are not assessed at admission to or discharge from the SNF. The lack of data at admission and discharge impairs our ability to measure patients' changes in the SNF setting and our ability to compare patients across post-acute settings.

The admission assessment information is recorded on the five-day assessment, which can be conducted any time during the first eight days of a stay. In 2003, only 4 percent of patients were assessed within three days of being admitted to a SNF (Figure 4A-4). Assessing patients

later in a stay, instead of at admission, may understate the improvement patients achieve during their stay. The lack of consistency in when the five-day assessment is conducted affects our ability to compare patients—differences on the patient assessment can be a function of actual differences or the timing of the assessment. The lack of discharge information means that patient improvements are measured only for those patients who stay long enough to have a second assessment completed. We do not have this information for up to 45 percent of patients because they stayed 14 or fewer days (MedPAC 2005a).

In addition to impairing our ability to assess patients in the SNF setting, the lack of information at admission and discharge makes it impossible to compare SNF patient outcomes to outcomes in other post-acute care settings. Because we do not know how SNF patients changed during the SNF stay, we cannot compare their improvements (or deteriorations) with the changes achieved by similar patients in other settings. We cannot assess the extent to which various post-acute settings are substitutes or compare the cost of achieving outcomes in different settings.

An additional complication of patient assessment for quality measurement purposes is the “look-back period” used in many of the MDS measures (Mathematica 2001). The MDS instructs the assessor to consider the patient’s condition over the past 7 or 14 days, which can extend back into the hospital stay. Particularly for the first assessment, these 7-day and 14-day look-back periods will capture a patient’s condition prior to the SNF admission and may not reflect the patient’s condition at admission. Although patient history is important for care planning, the initial MDS assessment does not capture the patient’s condition upon admission, thereby confounding the measurement of changes that occurred during the SNF stay and the comparability of patients. For example, the physical functioning section asks about the patient’s most dependent state during the past seven days, which may have been while the patient was still in the hospital. The look-back periods can also result in an overstatement of the improvement achieved during the SNF stay if it includes any improvement that actually occurred while the patient was still in the hospital.

We have commented that the MDS is not reliable and that quality measures based on it may not reflect the quality of care provided in a SNF (MedPAC 2005c). In addition to the look-back periods and the timing of the assessments,

important portions of the survey are susceptible to misunderstandings and errors. GAO and the OIG found that errors arose in part because the assessors interpreted the MDS definitions differently (GAO 2002a and OIG 2000b). For example, MDS coordinators interviewed by the OIG said that section G of the MDS (which assesses the activity of daily living (ADL) status of patients) was the most difficult to complete (GAO 2002b). They explained that capabilities are viewed very differently, and they would like the tool to be less subjective and include more specific measures. Post-acute care experts told us that the MDS measures were too ambiguous and that much narrower, more explicit measures should be used to assess quality of care. For example, one expert noted that in assessing ADLs, the amount of help required by a patient is influenced by the physical ability of the caregiver to provide assistance such as lifting.

As we noted last year, the shortcomings of the MDS and inconsistency with the patient assessment tools used in the other post-acute settings require a new patient assessment tool (MedPAC 2005b). We recognize that the development of such a tool is a complicated, multiple-year undertaking, which CMS has started. In the interim, we considered how the SNF quality measures might be improved to better reflect the care furnished to short-stay patients.

### **Additional quality measures for short-stay patients**

We recommended last year that CMS expand its measures for short-stay patients and discussed available measures such as rehospitalization and discharge to the community (MedPAC 2005c). Perhaps most importantly, we recommended collecting data on functional status at admission and discharge so that we can assess how all patients changed during the SNF stay. Given the widespread provision of therapy services, a measure focused on beneficiaries’ ability to perform ADLs is key to assessing SNF care. Measuring the improvements a patient was able to achieve between admission and discharge and the amount of time it took to attain improvements could facilitate evaluation of differences in the amount of therapy provided to achieve similar patient outcomes (Jette et al. 2005a, Jette et al. 2005b). Adequate risk adjustment is crucial to making accurate comparisons.

### **Process measures**

In addition to the outcome measures we recommended last year, we considered whether process measures could be used to measure the quality of care furnished in SNFs.

While outcomes measures are the ideal quality measures because they tell whether a patient's condition changed while under the care of a provider, measures of whether a provider followed well-established clinical processes in caring for patients can also assess important dimensions of quality. Risk adjustment is also less of a barrier to the validity of process measures than outcome measures.

Because patient outcomes may be due to the severity of the patient's condition or to factors unrelated to a SNF stay, process measures could provide a quality of care metric that is under the control of the provider. Experts in SNF quality told us that for some dimensions of care, outcomes might not be clearly identified or attributable to the care furnished by the SNF. Particularly with short stays, it may be difficult to know whether outcomes are the direct result of the care provided in the SNF. Process measures also instruct providers on how to change their practices. Clinicians often support using process measures to evaluate quality because they measure aspects of care that the provider can control and are based on evidence linking specific provider activities to positive patient outcomes.

We reviewed literature on guidelines applicable to aspects of SNF care and spoke with experts about process measures for SNF care. We found that practice guidelines are available for key aspects of SNF care and experts with whom we spoke said that certain care processes should be followed in SNFs. Some of these processes—such as pressure ulcer prevention and management, pain management, and depression screening—are broad. Others, such as glucose monitoring for diabetics, are more narrowly focused on patients with particular conditions. CMS has changed the MDS to capture one process measure in the nursing facility—immunization rates for influenza and pneumonia. Here we provide some options for exploring process measures that could provide valuable information about the quality of care provided in SNFs. However, additional work to assess the strength of the clinical evidence and the level of consensus for process measures for SNF care is still needed.

**Generally applicable process measures** Quality experts noted that multiple measures of the same clinical domain help capture the multiple dimensions of quality. Process measures could be developed to assess the same dimensions of care as existing publicly reported SNF outcomes measures—pain management and pressure ulcers.

- **Pain management**—Because the vast majority of SNF patients experience pain, experts thought pain management was an important dimension to capture. The current measure is narrow because it flags only certain levels of pain and it measures pain at only one point in time. Experts told us that assessors can be confused about how to code a patient with considerable pain that was successfully managed. One study found that the quality of MDS documentation of pain was better at nursing homes with large hospice populations (Wu et al. 2005). Our interviewees thought that an indicator focused on appropriate pain management techniques would be a useful measure. For example, the measure could ask how consistently the SNF evaluated patients for pain and whether pain management protocols were followed.
- **Pressure ulcers**—Experts we interviewed thought that process measures—such as, did the staff follow well-established guidelines for preventing, identifying, and treating pressure sores?—would be a valuable measure of quality care for pressure ulcers. Outcome and process measures might complement each other by indicating whether the care process could be improved. However, the identification of effective processes for avoiding pressure ulcers is critical to the development of valid process measures. One study found no relationship between process and outcome measures for pressure sores—facilities with low and high prevalence of sores were equally poor at preventing and managing pressure sores (Bates-Jensen et al. 2003). This finding points to the need to measure processes that demonstrably increase the likelihood of improved patient outcomes.

Clinical experts said that measuring processes that were known to be beneficial, particularly narrowly defined ones, would indicate that SNFs were taking appropriate preventive measures to avoid declines in health. Some experts recommended a measure recording whether weekly visits by a physician, a physician's assistant, or a nurse practitioner had occurred as a way to ensure adequate medical supervision of care. Experts also noted that the measures should be simple enough for trained staff who do not necessarily have advanced degrees to assess and document. Simple measures are more likely to be recorded accurately.

**Condition-specific process measures** Evidence-based guidelines are available for many types of patients treated in SNFs, including measures for hip fracture, stroke,

congestive heart failure, pneumonia, diabetes, and urinary incontinences (Mathematica 2001). Diagnosis-specific measures could provide useful feedback information to the SNFs about their care processes for diagnoses and conditions common among SNF patients. Such measures, if implemented in multiple post-acute care settings, would have the additional benefit of enabling comparison of care provided to patients with similar diagnoses across these settings.

Claims data and tailored use of the MDS could be used to develop certain diagnosis-specific measures, but other measures would require a new data collection instrument. Hospital claims could be combined with MDS information to assess whether stroke patients with dysphagia received a swallowing evaluation and speech therapy. (This and other examples of potential diagnosis-specific process measures are given in Table 4A-5.) MDS questions could be used to evaluate whether patients' ability to speak and swallow improved. Certain MDS questions on the ability to walk, rather than the entire section evaluating a patient's ability to perform ADLs, could assess improvement in post-hip surgery patients. In addition, patients with significant comorbidities could have additional measures such as:

- patients with end-stage renal disease: measures of dialysis adequacy and anemia management;
- patients with dehydration, weight loss, or malnutrition: a nutritional consult;
- patients with depression or dementia: a psychiatric evaluation; and
- patients with dysphagia: a swallowing evaluation.

While some experts thought that diagnosis-specific measures would provide SNFs with information on evidence-based processes of care, all noted that the poor state of diagnosis coding on the MDS by SNFs presented a serious obstacle. In our June 2005 report, we noted the limitations of the MDS in recording diagnoses (MedPAC 2005c). Using only check-off lists, the MDS does not use ICD-9-CM (International Classification of Diseases, Ninth Revision, Clinical Modification) codes and does not require identification of the primary versus secondary diagnoses. Before diagnosis-specific process measures could be used in this setting to measure quality or be used to compare patients across post-acute settings, the coding of diagnoses needs to improve so that all patients with a particular diagnosis during their SNF stay can be identified.

One expert noted that caregiver documentation is key to improving the quality of care in SNFs. Until documentation is part of the care planning and patient assessment processes that caregivers already do on the floors (such as the charting certified nurse assistants and other caregivers document every shift regarding each patient's fluid intake, activities, medications, and toileting), stand-alone documentation activities are likely to be inaccurate. This expert noted that once SNFs integrate care planning, patient assessment, and documentation activities in a way that facilitates caregiver activities, not only does documentation (and therefore measurement) improve, but the caregivers clamored for feedback data (and the information technology it required) in a real-time basis. These efforts can improve the quality of care: The expert noted that clearly linking documentation of conditions related to the development of pressure ulcers to patient assessment and care planning resulted in a 30 percent reduction in high-risk pressure sores compared with previous levels and to national averages.

## Evaluating individual SNF performance

Further work is still needed to determine whether the additional outcome and process measures we recommend are appropriate for paying skilled nursing facilities based on the quality of care they provide. Further work should assess the strength of the clinical evidence and the level of consensus for various process measures.

In addition, for any measure, the relatively small share of any skilled nursing facility's patients that are Medicare-covered SNF patients raises issues about adequate patient population to produce stable quality measures at the facility level. This concern is compounded when considering quality measures that apply to rare events or subpopulations of patients in the facility. Medicare beneficiaries make up, on average, 11 percent of a SNF's patients and when spread across various diagnoses, the individual measures would reflect the care of an even smaller number of patients. For example, the five most frequent diagnoses (based on the patients' prior hospital stays) account for less than 30 percent of SNF admissions. To ensure that the quality measures reflect the SNF care provided by a facility, individual measures may need to be combined into a composite measure. We currently have work under way to explore the extent to which low frequency and small patient populations affect our ability to compare individual facilities using measures of avoidable rehospitalizations and discharge to the community after 30 days. Another way to increase



**TABLE  
4A-5**

**Examples of diagnosis-specific goals and potential quality measures**

Diagnosis	Diagnosis-specific goals	Potential measures
Stroke	<ul style="list-style-type: none"> <li>• Improved ambulation, range of motion, speech and cognitive functioning.</li> <li>• For patients with dysphasia, patients taught to swallow.</li> <li>• Prevention of recurrent stroke.</li> </ul>	Percent of patients: <ul style="list-style-type: none"> <li>• on anticoagulation and cholesterol-lowering drugs.</li> <li>• with dysphasia who have a swallowing evaluation and receive SLP services.</li> </ul>
Fracture of femur	<ul style="list-style-type: none"> <li>• Improved ambulation and range of motion.</li> <li>• Successful pain management.</li> </ul>	Percent of patients: <ul style="list-style-type: none"> <li>• whose pain is frequently assessed and treated.</li> <li>• with surgical wounds who are receiving surgical wound care.</li> </ul>
Pneumonia	<ul style="list-style-type: none"> <li>• Successful treatment of disease.</li> </ul>	Percent of patients: <ul style="list-style-type: none"> <li>• on antibiotics.</li> <li>• receiving full course of antibiotics.</li> </ul>
Heart failure	<ul style="list-style-type: none"> <li>• Heart condition successfully managed.</li> </ul>	Percent of patients: <ul style="list-style-type: none"> <li>• on ACE inhibitors.</li> <li>• who have weekly blood work to evaluate electrolyte balance and renal function.</li> <li>• who have weight monitoring.</li> </ul>

Note: SLP (speech language pathology), ACE (angiotensin-converting enzyme)

Source: MedPAC interviews with quality experts and Mathematica Policy Research, Inc. 2001.

the patient population included in a quality measure is to develop and use measures that capture important dimensions of care for all patients—short-stay and long-term care—in a facility.

## Quality measurement recommendation

We are reiterating our recommendation from last year for CMS to develop additional SNF quality measures and adding additional recommendations to develop process measures and collect diagnosis data.

### RECOMMENDATION 4A-3

**To improve quality measurement, the Secretary should:**

- **collect information on activities of daily living at admission and at discharge;**
- **develop and use more quality indicators, including process measures, specific to short-stay patients in skilled nursing facilities; and**
- **put a high priority on developing appropriate quality measures for pay for performance.**

### RATIONALE 4A-3

Currently, CMS has only three quality measures for SNF patient care, all of them limited. These measures—delirium, pain, and pressure ulcers—are too limited to be the only set of quality measures that CMS uses for SNFs. One way to improve the SNF measure set would be to collect ADLs at admission and discharge. However, this does not address all the shortcomings of the current measures nor expand the set of quality measures for SNF care. Other quality indicators—rehospitalization, discharge to the community, ADL improvement, and process measures—should be developed because they measure important aspects of care for SNF patients and could apply to all SNF stays. Medicare urgently needs quality indicators that allow the program to assess whether patients benefit from SNF care and to distinguish between facilities. Rehospitalization and discharge to the community measures are currently calculable from administrative data. Process measures should be developed for those areas where well-accepted, evidence-based guidelines exist.

**Spending**

- This recommendation would not affect federal program spending relative to current law.

**Beneficiary and provider**

- This recommendation is expected to support quality improvement efforts. It also would minimally increase the administrative burden on providers if the assessment of ADLs at admission could be substituted for the first assessment and only a few items were assessed for quality purposes at discharge.

Although we do not anticipate changes to benefit spending, CMS would likely incur administrative costs in calculating and developing quality measures. ■

## Endnotes

---

- 1 Medicare covers up to 100 SNF days in a spell of illness. Medicare pays 100 percent of the payment rate for the first 20 days of a SNF stay. From the 21st to the 100th day, beneficiaries are responsible for a copayment equal to one-eighth of the hospital deductible, or \$114 per day in fiscal year 2005.
- 2 With approval from CMS, certain Medicare-certified hospitals—typically small, rural hospitals and critical access hospitals—may also provide extended care skilled nursing services in the same hospital beds they use to provide acute care services. These are called swing bed hospitals. We do not include an analysis of swing beds in this report. On July 1, 2002, Medicare began paying swing bed hospitals that are not critical access hospitals according to the SNF prospective payment system for SNF services provided to Medicare beneficiaries. Critical access hospitals continue to be paid for care in their swing beds based on their costs.
- 3 The SNF per diem payment rates do not cover the costs of physician services or services of certain other practitioners (such as qualified psychologists). Medicare Part B covers these services. The per diem rates do cover the costs of physical, occupational, and speech therapies, even if a physician supervises.
- 4 Medicare does not typically reimburse SNFs for the last three RUG categories because they do not usually require skilled care. CMS's decision to reimburse for these last three RUG categories is made on a case-by-case basis.
- 5 The Balanced Budget Act of 1997 instructed CMS to set the Medicare SNF payment rates at a level equal to a weighted mean of freestanding costs plus 50 percent of the difference between the freestanding mean and a weighted mean of all SNF costs (hospital-based and freestanding) combined.
- 6 Rates for the extensive services RUGs were reduced relative to the 2005 rates for these groups and relative to other RUGs in 2006.
- 7 Data on this pressure ulcer measure were published beginning in 2004.
- 8 Examples of specific covariates used for risk adjustment include age, dysphagia, bedfastness, and renal failure.
- 9 This analysis included freestanding SNFs with complete cost report data in each year between 2000 and 2004.
- 10 When calculating SNFs' aggregate costs in the base year, we increase the estimated nursing share of routine costs reported on the cost reports by the additional nursing costs of caring for Medicare SNF patients. This adjustment has the effect of increasing Medicare costs and thus reducing the Medicare margin.
- 11 The extensive services groups include patients who have received intravenous medications or tracheostomy care, have required a ventilator/respirator or suctioning in the past 14 days, or have received intravenous feeding in the past 7 days.
- 12 To limit SNFs' liability for services typically outside the scope of SNF care, the Congress excluded payments for certain high-cost, low-probability ancillary services from the SNF per diem rates. Thus, Medicare pays separately when SNF patients receive emergency room care, outpatient hospital scans, imaging and surgeries, and certain high-cost chemotherapy agents and prosthetic devices.

## References

---

- Abt Associates, Inc. 2005. *Design and Validation of Post-Acute Care Quality Measures*. Abt Associates Subcontract: RAND Prime Contract No. 500-00-026 (TO 2). Cambridge, MA: Abt. January 31.
- Abt Associates, Inc. 2003. *Validation of long-term and post-acute care quality indicators*. Final report prepared for CMS. Cambridge, MA: Abt. June.
- Abt Associates, Inc. 2001. *Appropriateness of minimum nurse staffing ratios in nursing homes: Phase II final report*. Cambridge, MA: Abt. Winter.
- Bates-Jensen, B. M., M. Cadogan, D. Osterweil, et al. 2003. The Minimum Data Set pressure ulcer indicator: Does it reflect differences in care processes related to pressure ulcer prevention and treatment in nursing homes? *Journal of the American Gerontological Society* 51, no. 9: 1203–1212.
- Cain Brothers. 2005. Cain Brothers' indices: assisted living and skilled nursing indices compared to the S&P 500 Index. October. <http://www.cainbrothers.com>.
- Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2005. Medicare program; prospective payment system and consolidated billing for skilled nursing facilities for FY 2006. Final rule. *Federal Register* 70, no. 149 (August): 45025–45074.
- Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2000. Medicare program; prospective payment system and consolidated billing for skilled nursing facilities. Update, proposed rule. *Federal Register* 65, no. 69 (April): 19188–19236.
- Dalton, K., and H. A. Howard. 2002. Market entry and exit in long-term care. *Health Care Financing Review* 24, no 2: 17–32.
- Dalton, K., S. C. Stearns, and J. Thorpe. 2004. An assessment of selection effects in Medicare patient referrals to hospital-based versus freestanding skilled nursing facilities. Unpublished final report for MedPAC.
- Department of Housing and Urban Development. 2005. FY 05 initial endorsement reports: 232 health care (nursing homes, assisted living, board & care) <http://www.hud.gov/offices/hsg/mfh/fhamie/fy05mie/nhstactiv.pdf>.
- Department of Housing and Urban Development. 2004. FY 04 initial endorsement reports: 232 health care (nursing homes, assisted living, board & care). <http://www.hud.gov/offices/hsg/mfh/fhamie/fy04mie/nhstactiv.pdf>.
- FitchRatings. 2005. 2005 industry outlook for nonprofit continuing care retirement communities and nursing homes. <http://www.fitchratings.com>.
- Fries, B. E., K. Lapane, T. Moore, et al. 2000. *Variation in prescribed medication and other non-therapy ancillary costs in skilled nursing facilities: Potential RUG–III refinements*. Cambridge, MA: Abt Associates, Inc.
- Government Accountability Office. 2003. *Skilled nursing facilities: Medicare payments exceed costs for most but not all facilities*. GAO–03–183. Washington, DC: GAO.
- Government Accountability Office. 2002a. *Nursing homes: Federal efforts to monitor resident assessment data should complement state activities*. GAO–02–279. Washington, DC: GAO.
- Government Accountability Office. 2002b. *Nursing homes: Public reporting of quality indicators has merit, but national implementation is premature*. GAO–03–187. Washington, DC: GAO.
- Government Accountability Office. 2002c. *Skilled nursing facilities: Providers have responded to Medicare payment system by changing practices*. GAO–02–841. Washington, DC: GAO.
- Government Accountability Office. 2001. *Skilled nursing facilities: Services excluded from Medicare's daily rate need to be reevaluated*. GAO–01–816. Washington, DC: GAO.
- Government Accountability Office. 1999. *Skilled nursing facilities: Medicare payments need to better account for nontherapy ancillary cost variation*. GAO/HEHS–99–185. Washington, DC: GAO.
- Jette, D., R. L. Warren, and C. Wirtalla. 2005a. Functional independence domains in patients receiving rehabilitation in skilled nursing facilities: Evaluation of psychometric properties. *Archives of Physical Medicine and Rehabilitation* 86 (June): 1089–1094.
- Jette, D., R. L. Warren, and C. Wirtalla. 2005b. The relation between therapy intensity and outcomes of rehabilitation in skilled nursing facilities. *Archives of Physical Medicine and Rehabilitation* 86, (March): 373–379.
- Kramer, A. M., and R. Fish. 2001. The relationship between nurse staffing levels and the quality of nursing home care. In *Appropriateness of minimum nurse staff ratios in nursing homes, phase II final report, vol. 1 of 3*. Cambridge, MA: Abt Associates, Inc.



- Kramer, A. M., T. B. Eilertsen, M. K. Ecord, et al. 1999. *A prospective study of new case-mix indices for subacute care*. Final report to National Subacute Care Association and the American Health Care Association. Denver, CO: Morrison Informatics and University of Colorado Health Sciences Center. June.
- Liu, K., and K. Black. 2002. Hospital-based and freestanding skilled nursing facilities: Any cause for differential Medicare payments? *Inquiry* 40 (Spring 2003): 94–104.
- Mathematica Policy Research, Inc. 2001. *Developing clinical indicators for needed skilled nursing care: A feasibility study*. Princeton, NJ: Mathematica Policy Research.
- Medicare Payment Advisory Commission. 2005a. *A data book: Healthcare spending and the Medicare program*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2005b. *Report to the Congress: Issues in a modernized Medicare program*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2005c. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2002. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2001. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Office of Inspector General, Department of Health and Human Services. 2001. *Medicare beneficiary access to skilled nursing facilities*. OEI-02-01-00160. Washington, DC: OIG. July.
- Office of Inspector General, Department of Health and Human Services. 2000a. *Medicare beneficiary access to skilled nursing facilities*. OEI-02-00-00330. Washington, DC: OIG. September.
- Office of Inspector General, Department of Health and Human Services. 2000b. *Nursing home resident assessment, quality of care*. OEI-02-99-00040. Washington, DC: OIG.
- Office of Inspector General, Department of Health and Human Services. 1999. *Early effects of the prospective payment system on access to skilled nursing facilities*. OEI-02-99-00400. Washington, DC: OIG. August.
- Standard & Poor's. 2005. *Kindred Healthcare: Subindustry outlook*. The McGraw-Hill Companies, Inc. November 19.
- van der Walde, L. 2006. Personal communication via e-mail on January 18.
- White, C., and S. Seagrave. 2005. What happens when hospital-based skilled nursing facilities close? A propensity score analysis. *Health Services Research* 40:6, part I (December): 1883–1897.
- White, C. 2003. Rehabilitation therapy in skilled nursing facilities: Effects of Medicare's new prospective payment system. *Health Affairs* 22, no. 3 (May/June): 214–223.
- White, C., S. D. Pizer, and A. J. White. 2002. Assessing the RUG-III resident classification system for skilled nursing facilities. *Health Care Financing Review* 24, no. 1: 7–15.
- Wu, N., S. C. Miller, K. Lapane, et al. 2005. The quality of the quality indicator of pain derived from the Minimum Data Set. *Health Services Research* 40, no. 4: 1197–1216.